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Cornhusker Economics

Cooperative Extension

Institute of Agriculture & Natural Resources
Department of Agricultural Economics
University of Nebraska – Lincoln

Crop Price Declines Could Trigger Revenue Insurance Indemnities

Market Report	Yr Ago	4 Wks Ago	10/29/04
<u>Livestock and Products,</u>			
<u>Weekly Average</u>			
Nebraska Slaughter Steers, 35-65% Choice, Live Weight	\$102.13	\$83.45	\$84.93
Nebraska Feeder Steers, Med. & Large Frame, 550-600 lb	108.91	126.03	123.69
Nebraska Feeder Steers, Med. & Large Frame 750-800 lb	111.73	120.17	114.61
Choice Boxed Beef, 600-750 lb. Carcass	171.09	136.74	141.74
Western Corn Belt Base Hog Price Carcass, Negotiated	46.76	75.57	71.21
Feeder Pigs, National Direct 45 lbs, FOB	36.52	46.65	53.51
Pork Carcass Cutout, 185 lb. Carcass, 51-52% Lean	55.63	74.54	71.15
Slaughter Lambs, Ch. & Pr., 90-160 lbs., Shorn, Midwest	88.00	89.37	85.75
National Carcass Lamb Cutout, FOB	208.00	220.40	224.12
<u>Crops,</u>			
<u>Daily Spot Prices</u>			
Wheat, No. 1, H.W. Omaha, bu	3.58	3.19	3.30
Corn, No. 2, Yellow Omaha, bu	2.33	1.78	1.68
Soybeans, No. 1, Yellow Omaha, bu	7.79	4.85	4.94
Grain Sorghum, No. 2, Yellow Columbus, cwt	4.05	2.80	2.71
Oats, No. 2, Heavy Minneapolis, MN, bu	1.59	1.62	1.61
<u>Hay</u>			
Alfalfa, Large Square Bales, Good to Premium, RFV 160-185 Northeast Nebraska, ton	115.00	115.00	115.00
Alfalfa, Large Rounds, Good Platte Valley, ton	65.00	62.50	62.50
Grass Hay, Large Rounds, Good Northeast Nebraska, ton	67.50	57.50	57.50
* No market.			

Two occurrences that could affect grain producers' incomes this year have just come into play. The first is the establishment of the harvest price for the crop insurance revenue programs. The second is the counter cyclical payments for the farm commodity program.

Crop Insurance Revenue Programs

Producers who purchased Revenue Assurance (RA) or Crop Revenue Coverage (CRC) policies this year could still receive an indemnity payment even though yields have been relatively good.

The CRC corn harvest price is the average of the closing prices during the month of October for the DEC contract on the CBOT, and the soybean price is the average of the NOV contract during October. The RA harvest price option for soybeans uses the same harvest price as CRC. The corn RA harvest price is the average of the DEC contract during November. The grain sorghum CRC harvest price this year is set at 95 percent of the corn price. The prices for this year are shown in Table 1 on the next page.

Corn Example Situation

APH Yield = 182 bushels

Coverage Level = 75 percent

Planting time revenue guarantee for CRC or RA with the harvest price option was:

$$\$2.83 \times 182 \text{ bu} \times .75 = \$386.30$$

This producer is guaranteed the \$386.30 revenue per acre but the harvest price is now only \$2.05 per bushel. What is the trigger yield or how many bushels does it take to generate a revenue of \$386.30? That is calculated by dividing the guaranteed revenue by the harvest price or, $\$386.30 / \$2.05 = 188.4 \text{ bu}$. If the yield for this situation is less than 188.4 bushels per acre, there will be an indemnity payment.

Table 1.

	Corn	Grain Sorghum	Soybeans
Planting Price	\$2.83	\$2.71	\$6.72
CRC Harvest Price	\$2.05	\$1.95	\$5.26

The price ratio of the spring price to the harvest price is the key factor. To calculate the trigger yield for different situations, multiply the price ratio times the APH yield times the coverage level purchased.

Trigger Yield = Price Ratio x APH x Coverage Level

Note: the math for the trigger yield is: $(\$2.83 \times \text{APH} \times \text{Cov. Level}) / \2.05 which equals: Price ratio x APH x Cov Level.

The price ratio for corn this year is $2.83/2.05 = 1.38$

Hence, the trigger yield for the example situation is:

$$1.38 \times 182 \text{ bu} \times .75 = 188.4 \text{ bu.}$$

Soybean Example

For soybeans, the price ratio is $\$6.72/5.26 = 1.28$

If the APH was 42 bushels and 75 percent coverage was purchased, the trigger yield will be:

$$1.28 \times 42 \times .75 = 40.3 \text{ bushels per acre}$$

Again, if the yield is less than 40.3 bushels per acre for this situation, there will be an indemnity payment. To calculate your expected indemnity:

1. Multiply $\$2.05 \times$ actual yield to get “calculated income”
2. Calculate “revenue guarantee”: $\$2.83 \times \text{APH} \times \text{Coverage Level}$ purchased
3. Subtract the “calculated revenue” from the “revenue guarantee”

The corn harvest price for RA with harvest price option will be determined this month.

Farm Program Payments

On October 22, 2004, USDA announced the availability of the first partial 2004 crop year counter cyclical program payments, as well as the final counter cyclical payment situation for the 2003 crop.

Table 2 shows the program prices and the maximum counter cyclical payment for this year. The target prices for corn and grain sorghum have both increased by \$.03 per bushel this year. The trigger price for the counter cyclical payment is the target price minus the direct payments, or \$2.35 for this year. The national average loan rates for corn and grain sorghum have decreased by \$.03 per bushel, from \$1.98 to \$1.95 this year. The maximum CC payment for corn this year then is the CC target price minus the national average loan rate or $\$2.35 - \$1.95 = \$.40$. USDA has set the projected CC payments for corn and grain sorghum at the maximums of \$.40 and \$.27, respectively. The first payment of 35 percent of the total is now being paid. The 35 percent payment rate allows USDA some “wobble room” on the projected price when the next payment, if any, is due in February.

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Table 2. 2004/2005 USDA Program Rates and Counter Cyclical Payment Trigger Price

Crop	Target Price	Direct Payment Rate	Loan Rate	Counter Cyclical Trigger Price	Maximum Counter Cyclical Payment	Projected 2004 Crop Year CC Rate	First Partial Rate
	(A)	(B)	(C)	(D=A-B)			
Corn (bu)	2.63	0.28	1.95	2.35	0.40	.40	.1400
Sorghum (bu)	2.57	0.35	1.95	2.22	0.27	.27	.0945
Soybean (bu)	5.80	0.44	5.00	5.36	0.36	.26	.0910
Wheat (bu)	3.92	0.52	2.75	3.40	0.65	.10	.0350